

Notice of Allowability

Application No.

09/806,606

Examiner

Pedro J. Cuevas

Applicant(s)

SABAN ET AL.

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on December 4, 2003.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☒ including changes required by the proposed drawing correction filed 05 September 2002, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-26 are allowed.

Hibino et al. disclose the construction of a rotor core comprising:

a plurality of rotor laminations, each of said laminations having an outer periphery;

a first set of rotor laminations comprising a plurality of slots having skew portions extending in a first direction; and

a second set of said rotor laminations comprising a plurality of slots having skew portions extending in a second direction.

Berger teach the construction of a rotor core having a plurality of notches having:

an open end at said outer periphery;

a rectangular or irregular cross sectional shape, extending axially with respect to a center axis of said rotor core and along an entire length and several portions of said core; and

substantially aligned radially and coextensive radially with at least one of said skew portions, for the purpose of producing of a groove shape for a squirrel-cage rotor which retains the conductor rod in a fixed position and thereby prohibits, with certainty, any imbalancing.

Pielok teach a rotor core wherein no bridge of lamination material extends between at least one of said rectangular cross sectional shape notches and a respective one of said slots for

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the purpose of providing laminations aligned in such a way that an automatic winding process can be performed through the respective winding openings.

Prymak teaches the construction of a rotor core comprising a third set of rotor laminations for the purpose of providing a scattering of the magnetic forces across the field and case structure in such a way as to reduce excitation of the resonant modes of the case.

Uchida teach the construction of a rotor of synchronous motor having a plurality of permanent magnets located in lamination notches for the purpose of forming projection and recesses at the ends of each unitary rotor element.

2. The following is an examiner's statement of reasons for allowance.

The prior art of record, taken alone or in combination, fails to teach the construction of:

a rotor as described on independent claim 1, comprising a plurality of notches having an open end at said outer periphery and substantially aligned radially and coextensive radially with at least one of said skew portions, wherein at least one of said notches is occupied by a metal;

a rotor for an electric motor as described on independent claim 14, comprising a plurality of notches having an open end at said outer periphery and substantially aligned radially and coextensive radially with at least one of said skew portions, and a central rotor shaft opening, wherein at least one of said notches is occupied by a metal and remaining of said notches are occupied by at least one permanent magnet; and

an electric motor as described on independent claim 21, comprising:

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a plurality of notches having an open end at said outer periphery and substantially aligned radially and coextensive radially with at least one of said skew portions;

a plurality of secondary conductors extending through said slots, wherein at least one of said notches are occupied by a metal and remaining of said notches are occupied by at least one permanent magnet, wherein the at least one permanent magnet is magnetized to form a number of poles equal to the number of poles formed by the second main winding.

Dependent claims 2-13, 15-20, and 22-26 are considered allowable by their respective dependence on allowed independent claims 1, 14, and 21.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

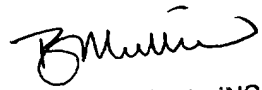
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
January 5, 2004


BURTON S. GILLINS
PRIMARY EXAMINER